

Original Article

Investigation of Leukemia Frequency in Children of Qazvin Province and its Correlation with Gender, Age, and Blood Groups between 2006-2016

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Abstract

Background: About 8 percent of all cancers in human population are related to leukemia and it is one of the most common malignancies in children. The aim of this study was to compare the prevalence of age, gender and blood group types with the frequency of leukemia among the children with leukemia in Qazvin province during the 2006 to 2016.

Materials and Methods: This was a cross-sectional analysis. Investigated population was 110 children and adolescents under 18 years in the hospitals of Qazvin province. The data collecting method was through review of medical records of the patients and their analysis performed by using SPSS version 16.

Results: According to data from this study, leukemia ALL-L1 is more frequent in Qazvin than other types of leukemia, and children with ages 0-5 years was more than other age groups. This disorder is more common in boys than girls, and among the patients, the people who has A and O blood groups, and Rh + are the most abundant.

Conclusion: such factors like age, gender and blood groups can use as prognostic factors in children leukemia. So that leukemia in children less than 5 years old is more than any other age. In addition to that; the incidence of leukemia ALL-L1 reduced with increasing age in the general population in Qazvin and number of boys with leukemia is more than girls.

Keywords: leukemia, children, frequency, blood group

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Introduction

Neoplastic diseases are the second or third cause of mortality in the most developed and uncivilized

country. About 2 thousand new cases of cancer were reported in children in Iran annually and because of its importance and threatens the nation's health, so, it's necessary to have special consideration to this issue.